

**Meeting Minutes for *E. coli* Rulemaking Workgroup  
July 16, 2003, 12:30 p.m. to 3:30 p.m.  
Tippecanoe County Extension Office**

**Attendees included:**

Mary Ellen Gray, Bill Harkins, Dennis Clark, Lynn Newvine, Rose Filley, Kiran Verma, Roseann Hirschinger, Catherine Hess, David Kallander, R. M. Frank, Chad Frahm, Sara MacLaughlin, Dan Olson, Tom Ungar, Jodi Perras, and Paul Werderitch. Jim Meyer and Barb Lollar participated via conference call.

**Approval of Workgroup Meeting Minutes of 6/5/03:**

Mary Ellen asked the group whether there were any revisions or corrections made to the draft minutes of June 5, 2003. No comments were received.

**Update on First Notice:**

Mary Ellen explained that this is being listed as an Agenda item so as to keep the group apprised of the status of the first notice. She reiterated that the first comment period would be over at the end of July and that once the comments were received, IDEM would summarize and respond to those comments. She stated that IDEM would be sharing the summarized comments with the workgroup, or members could request copies of the comment letters if they needed. How soon the summary would be distributed would depend on the number and length of the comment letters. She explained that it was IDEM's role to respond to the comments received, but that she would be happy to discuss them with the group if they so desired.

**Review and Discussion of Full Body contact recreation:**

**Compilation of State Definitions of Primary and Secondary Contact Recreation;  
and Draft Primary and Secondary Contact Definitions:**

Mary Ellen explained that at the last meeting some members had expressed an interest in what other states are doing on this issue. She indicated that IDEM had previously prepared a document on this but after the last meeting had taken another stab at reviewing efforts of other states and revised the document which had been part of the distribution.

IDEM had also prepared and distributed the draft primary and secondary contact definitions. Mary Ellen opened up the meeting for comment and discussion. Jodi Perras stated that the draft definitions looked similar to Colorado, except for the wading issue. Discussion on the wading issue followed where one school of thought wanted to include wading in the secondary definition, while the other school of thought indicated that wading should be included in the primary definition. It was pointed out that hand to mouth ingestion was the issue. There was some debate as to the correct term to be used in the definition – “incidental ingestion” or “accidental ingestion”. It seemed that most agreed that wading should be part of the secondary contact recreation definition.

On the primary contact recreation there was a question of the definition of “small” vs. “large” quantity. It was stated that using examples in the definition was a good idea. There was also some discussion on “boating” vs. “rafting”. It was agreed to take out the term “rafting” from the primary contact definition. It was noted that Colorado uses rafting in their definition and that Michigan uses “dry boating” in their definition. It was mentioned that Michigan’s partial body contact recreation definition involves direct contact of some part of the body with water but normally not immersion of the head or ingestion water, and that we might consider doing something similar. Another point of debate was the use of the term “or other water” in both of the draft definitions. It was decided that the term should be removed for the sake of clarity. Discussion followed on “organized” recreational activities as opposed to “unorganized” or “unauthorized” recreational activities. A point was made that if children are involved, they do not pay attention to whether an activity is organized or authorized. It was reiterated that the main issue was whether ingestion was likely or unlikely to occur (and not the use). One opinion was that potential for argument existed on the situation being “unlikely to occur” or “likely to occur”.

Mary Ellen indicated that at the last meeting some workgroup members had shown a preference to utilization of risk levels. The EPA guidance was referenced with the 8 to 14 illnesses per 1000, which are being revised to 8 to 10 illnesses. It was also suggested that different sub-categories and levels could be used with the underlying objective of the need to protect from the risk. It was stated that Colorado could be used as an example to recategorize the groups. One way to tackle the task was to start with the less risky category. There could be some sub-categories and levels depending on the use.

After the discussion Mary Ellen read out the revised definitions based on the group’s input:

“Primary Contact Recreation: Any recreational water use in which the ingestion of water is likely to occur. These activities include but are not limited to swimming, kayaking, tubing, windsurfing and water skiing.”

“Secondary Contact Recreation: Any recreational water in which the ingestion of water is unlikely to occur. These activities include but are not limited to fishing, boating, wading, and limited contact incident to shoreline activities.”

#### **EPA’s Bacterial Water Quality Standards for Recreational Waters:**

Mary Ellen called the group’s attention to the document EPA had compiled “Bacterial Water Quality Standards for Recreational Waters, June 2003, Status Report”, and noted that the timing of the availability of the document was very good as IDEM staff were researching into what other states were doing. She indicated that the EPA document had been included in the package and it summarized water quality standards for recreational waters by region. She stated that IDEM did not see anything in the document that was inconsistent with what the group has been discussing.

#### **Primary and Secondary Contact Designations Discussion:**

A question was raised whether there was an accepted conversion formula for E. coli to fecal coliform or back i.e. a translator for fecal coliform. In general, E. coli is 80% of the fecal number. Enterococci is different. It was pointed out that it is difficult to compare E. coli and other measurement indicators like fecal coliform. It was suggested that some information was available on the EPA website. No parallel studies have been seen on this subject. It was agreed that there was no easy answer on this issue. It was explained that E. coli numbers were picked due to risk levels and that the e.coli standard was done by making a comparison with fecal coliform. There are 23 Enterococci to 100 e.coli. The only EPA approved method for salt water is Enterococci. 125 E. coli/100 ml as a geometric mean of five samples taken over 30 days relates to a risk level of about 8 illnesses/1000 people. Some members wondered when EPA would go final with the 8 to 10 illnesses risk levels. It was explained that the 14 illnesses per 1000 illnesses risk level could not be validated due to the lack of data. One suggestion was that data were not there and these numbers were based on an extrapolation. It was also reiterated that the illnesses study was done on adults eighteen and older and not on children. Factors such as dose, exposure, duration and immunity have to be considered as well. It was suggested that the workgroup should move forward with the 8 to 10 risk levels which we are most likely to be allowed, with two primary contact categories and one secondary contact category. A question was asked whether IDEM would take the first cut at designating primary contact and secondary contact. The response was that IDEM had not yet contemplated but it was likely that IDEM would establish certain waters as 8 illnesses per 1000. It was explained that at first all waters would be designated as the 8 risk level which would be the default for primary, and there would be a process in place for moving a water body to the 10 level. Another question was raised whether this process could be accomplished by a rule alone and without legislation. The response was affirmative. The process to change the primary contact use designation would be a rulemaking process with public participation. For a secondary contact use designation a Use Attainability Analysis process would be utilized demonstrating need to include protection of downstream uses. It was pointed out that moving a designation from 8 to 10 illnesses category would not result in much of a cost savings. Information was provided that Missouri is doing a similar program using Use Attainability Analysis. The city of Indianapolis would like IDEM to establish waters as 8/1000 and 10/1000 risk levels.

IDEM will be recirculating the document entitled "Primary Contact/Risk Designations" that Bill Harkins put together with the proposed process that communities would follow to have risk levels changed from 8 to 10. Links for Missouri will be re-sent to the group as well.

A question was asked whether the group wants to discuss different sample values. The single sample values are associated with risk levels and are used for monitoring purposes.

Discussion followed on the risk of swimming in certain areas, warning for overflows, and samples to see average per month. Establishing water quality standards are subject to being able to gather data and if found to not meeting the standards, remedial action can be taken to correct that. It was agreed that this proposed a lot of challenge. Confidence levels need to be applied also. The discussion concerned whether to apply a 95%

confidence level for infrequently used waters and a 75% confidence level for more frequently used waters. Members would like to see some comparisons to see real world results. IDEM will put together for discussion different scenarios and plug in numbers.

It was pointed out that some streams could be removed from the 303(d) list. EPA allows states to use whatever data they have. There are some options about how that can be applied. They have to meet a geometric mean of 235/100ml. Geometric mean is needed for primary contact designation. For primary contact designation and for 8/1000 we would utilize geometric mean and single sample with 10% exceedance level. Utilize 10/1000 geometric mean at 95 % or 75% confidence level. The document prepared by Roseann Hirschinger “ Report of the Distribution of E.coli Concentrations at Sites in Indiana” will be re-distributed.

It was suggested that everything was on the table and the group needs to consider the number of users, how many use that location (frequency), and look at children versus adults (age). Also need to look at what other states are doing. IDEM will check with EPA as to when the rule will be promulgated.

IDEM will put together draft definitions for primary contact designations (1a); and distinguish between primary contact 8 per1000 illnesses and primary contact 10 per 1000 illnesses (1b). The secondary contact designations have the same issues. We have the definitions and need to discuss the criteria that would apply. The process, which would be used, would be a UAA since it is a change in use designation. The concern was whether an arbitrary number would be used since there was no data or studies out there, and it was reiterated that there has to be a scientific basis for a number. Another concern was as to what kind of ceiling number would be placed, as a number would have to be established to keep people from getting ill. A question raised was whether a single sample value should be used. It was stated that there has to be a scientific basis for a criteria. A question was asked where law requires this. A suggestion was given that a disclaimer should be added stating that the E. coli standard would not cause any degradation of any stream designated for primary contact recreation. IDEM will prepare a narrative on secondary contact designation criteria.

### **Evolving Wet Weather and Water Quality Issues for CSO communities:**

Mary Ellen drew attention to the paper submitted by the City of Indianapolis, titled, “Evolving Wet Weather and Water Quality Standards Issues for CSO Communities”. She stated it lays out some good recommendations. IDEM will report on the ORSANCO August 12 and 13 meeting at the September workgroup meeting. ORSANCO is working with eight states.

They are preparing a proposal on wet weather use designation. It was recommended that the wet weather discussion be put off till we see the proposal from ORSANCO. Mary Ellen suggested that there was a possibility of setting up a separate workgroup to discuss wet weather.

Discussion followed in which some workgroup members voiced that they still had issues, which at some point had to be considered. Some members wanted to have wet weather

issues addressed while some were prepared to withhold judgement until after the ORSANCO meeting,

There was a discussion on possibly changing the date of the next meeting till early in the following week.

**Next Meeting Discussion Topics:**

Primary contact recreation data scenarios for criteria

Draft definitions for Primary and Secondary Contact Definitions and associated criteria

**Next Meeting:**

Tuesday August 26<sup>th</sup>, 12:30 p.m. to 3:30 p.m. (Rescheduled from August 20<sup>th</sup> per polling)  
Tippecanoe County Extension Office